IN THE CLAIMS

Please amend the claims as follows:

1. (Currently Amended) A method, comprising:

~~receiving a first data value into an external programmer from a pulse generator;~~

determining a duration of a QRS complex;

~~executing one or more algorithms, wherein the one or more algorithms use the first data value;~~

selecting among ventricular pacing sites in which to provide pacing pulses from ~~the~~ one or more algorithms using ~~the first data value~~ at least the duration of a QRS complex and a timing relationship between the right and left depolarizations; and

displaying at least one suggested ventricular pacing site in which to provide pacing pulses.

2. (Currently Amended) The method of claim 1, wherein ~~receiving the first data value includes sensing a cardiac signal having~~ determining a duration of a QRS complex[[;]] includes

~~measuring a duration interval of the QRS complex from the cardiac signal; and~~

providing the duration interval of the QRS complex from a pulse generator ~~as the first data value for use with the one or more algorithms~~.

3. (Currently Amended) The method of claim ~~2~~ 1, further including sensing a first cardiac signal in a right ventricular region and a second cardiac signal in a left ventricular region, and wherein displaying at least one suggested ventricular pacing site includes suggesting one or more ventricular chambers in which to provide pacing pulses based on the duration interval of the QRS complex.

4. (Previously Presented) The method of claim 3, wherein suggesting one or more ventricular chambers includes suggesting pacing in a left ventricle when the duration interval of the QRS complex is greater than or equal to 120 milliseconds and R_L occurs later than R_R, where R_L is a

time at which a depolarization in the left ventricle occurred and R_R is a time at which the depolarization in a right ventricle occurred.

5. (Previously Presented) The method of claim 3, wherein suggesting one or more ventricular chambers includes suggesting pacing in both a left ventricle and a right ventricle when the duration interval of the QRS complex is greater than or equal to 120 milliseconds and R_L occurs later than R_R, where R_L is a time at which a depolarization in the left ventricle occurred and R_R is a time at which the depolarization in a right ventricle occurred.

6. (Previously Presented) The method of claim 3, wherein suggesting one or more ventricular chambers includes suggesting pacing in a right ventricle when the duration interval of the QRS complex is greater than or equal to 120 milliseconds and R_R occurs later than R_L or at the same time as R_L, where R_L is a time at which a depolarization in the left ventricle occurred and R_R is a time at which the depolarization in a right ventricle occurred.

7 – 12. (Canceled)

13. (Currently Amended) The method of claim 1, ~~wherein receiving the first data value also includes~~ further including receiving a request to display one or more suggested pacing sites in which to provide pacing pulses; and

displaying an estimated time to complete executing the one or more algorithms to calculate the suggested pacing sites in which to provide pacing pulses.

14. (Previously Presented) The method of claim 1, including programming an implantable pulse generator with the suggested pacing sites in which to provide pacing pulses.

15. (Currently Amended) A medical device programmer, comprising:

a data input for receiving a ~~first data value~~ duration interval of a QRS complex from a pulse generator;

control circuitry for using the ~~first data value~~ duration interval of a QRS complex and a timing relationship between right and left ventricle depolarizations to select among ventricular pacing sites in which to provide pacing pulses;

a display screen to display at least one suggested ventricular pacing site in which to provide pacing pulses; and

an input to initiate programming the suggested ventricular pacing site in which to provide pacing pulses into the pulse generator.

16. (Currently Amended) The medical device programmer of claim 15, wherein the ~~first data value is a duration interval of a QRS complex~~ pacing pulses provide synchronized ventricular contractions.

17. (Previously Presented) The medical device programmer of claim 16, wherein the control circuitry includes a receiver/transmitter and a ventricular chamber selector coupled to the data input and the receiver/transmitter, the receiver/transmitter for receiving intrinsic intracardia electrograms of a left and right ventricle and the ventricular chamber selector for determining the relationship between R_L and R_R, where R_L is a time at which a depolarization in the left ventricle occurred and R_R is a time at which the depolarization in a right ventricle occurred, and suggesting one or more ventricular chambers in which to provide pacing pulses based on the duration interval of the QRS complex and the relationship between R_L and R_R.

18. (Previously Presented) The medical device programmer of claim 17, wherein the ventricular chamber selector suggests pacing in the left ventricle when the duration interval of the QRS complex is greater than or equal to 120 milliseconds and R_L occurs later than R_R.

19. (Previously Presented) The medical device programmer of claim 17, wherein the ventricular chamber selector suggests pacing in both the left ventricle and the right ventricle when the duration interval of the QRS complex is greater than or equal to 120 milliseconds and R_L occurs later than R_R.

20. (Previously Presented) The medical device programmer of claim 17, wherein the ventricular chamber selector suggests pacing in the right ventricle when the duration interval of the QRS complex is greater than or equal to 120 milliseconds and R_R occurs later than R_L or at the same time as R_L.

21 – 29. (Canceled)

30. (Withdrawn) The method of claim 1, wherein receiving the first data value includes sensing an atrial signal having atrial events and a ventricular signal having ventricular events;

measuring a duration interval of an P-R interval between an atrial event and a ventricular event; and

providing the P-R interval as the first data value for use with the one or more algorithms.

31. (Withdrawn) The method of claim 30, including suggesting an indicated pacing interval, T_n, for an AV delay based on the P-R-interval.

32. (Withdrawn) The method of claim 31, including determining whether the AV-interval is concluded by an intrinsic ventricular beat or a paced ventricular beat, calculating T_n from $T_n = a \cdot w \cdot AV_n + (1-w) \cdot T_{n-1}$, when AV_n is concluded by an intrinsic ventricular beat, and calculating T_n from $T_n = b \cdot w \cdot AV_n + (1-w) \cdot T_{n-1}$, when AV_n is concluded by a paced ventricular beat, where T_{n-1} is the previous value of the indicated P-R interval, AV_n is the time interval corresponding to the most recent P-R interval, and *a*, *b*, and *w* are coefficients.

33. (Withdrawn) The method of claim 1, wherein receiving the first data value includes sensing a right ventricular cardiac signal and a left ventricular cardiac signal, where the right and left cardiac signals include ventricular events;

measuring a duration interval of a V-V-interval between a right ventricular event and a left ventricular event; and

providing the V-V-interval as the first data value for use with the one or more algorithms.

34. (Withdrawn) The method of claim 33, including suggesting an LV offset value based on the V-V-interval.

35. (Withdrawn) The method of claim 34, including determining whether the V-V-interval is concluded by an intrinsic ventricular beat or a paced ventricular beat, calculating T_n from $T_n = a \cdot w \cdot VV_n + (1\text{-}w) \cdot T_{n-1}$, if VV_n is concluded by an intrinsic ventricular beat, and calculating T_n from $T_n = b \cdot w \cdot VV_n + (1\text{-}w) \cdot T_{n-1}$, if VV_n when VV_n is concluded by a paced ventricular beat, where T_{n-1} is the previous value of the first indicated pacing interval, VV_n is the time interval corresponding to the most recent V-V interval, and a, b, and w are coefficients.

36. (Withdrawn) The medical device programmer of claim 15, wherein the control circuitry includes a receiver/transmitter and a P-R delay determiner coupled to the receiver/transmitter, wherein the receiver/transmitter receives an atrial cardiac signal having atrial events and a ventricular cardiac signal having ventricular events, and wherein the P-R delay determiner measures a duration interval of an P-R interval between an atrial event and a ventricular event, and provides the P-R interval as the first data value for use with the one or more algorithms.

37. (Withdrawn) The medical device programmer of claim 36, where the P-R delay determiner suggests an indicated pacing interval, T_n, for an AV delay based on the P-R interval.

38. (Withdrawn) The medical device programmer of claim 37, wherein the P-R delay determiner determines whether the AV-interval is concluded by an intrinsic ventricular beat or a paced ventricular beat, and calculates T_n from $T_n = a \cdot w \cdot AV_n + (1\text{-}w) \cdot T_{n-1}$, when AV_n is concluded by an intrinsic ventricular beat, and calculates T_n from $T_n = b \cdot w \cdot AV_n + (1\text{-}w) \cdot T_{n-1}$, when AV_n is concluded by a paced ventricular beat, where T_{n-1} is the previous value of the indicated P-R interval, AV_n is the time interval corresponding to the most recent P-R interval, and a, b, and w are coefficients.

39. (Withdrawn) The medical device programmer of claim 15, wherein the control circuitry includes a receiver/transmitter and an LV-offset determiner coupled to the receiver/transmitter,

wherein the receiver/transmitter receives a right ventricular cardiac signal having ventricular events and a left ventricular cardiac signal having ventricular events, and wherein the LV-offset determiner measures a duration interval of an V-V interval between a right ventricular event and a left ventricular event, and provides the V-V-interval as the first data value for use with the one or more algorithms.

40. (Withdrawn) The medical device programmer of claim 39, wherein the LV-offset determiner suggests an LV offset value based on the V-V-interval.

41. (Withdrawn) The medical device programmer of claim 40, wherein the LV-offset determiner determines whether the V-V-interval is concluded by an intrinsic ventricular beat or a paced ventricular beat, and calculates T_n from $T_n = a \cdot w \cdot VV_n + (1-w) \cdot T_{n-1}$, if VV_n is concluded by an intrinsic ventricular beat, and calculates T_n from $T_n = b \cdot w \cdot VV_n + (1-w) \cdot T_{n-1}$, if VV_n when VV_n is concluded by a paced ventricular beat, where T_{n-1} is the previous value of the first indicated pacing interval, VV_n is the time interval corresponding to the most recent V-V interval, and *a*, *b*, and *w* are coefficients.

42. (Withdrawn) The medical device programmer of claim 37, wherein the P-R delay determiner adjusts the AV delay to account for a sensed AV delay offset.

43. (Withdrawn) The method of claim 31, wherein calculating one or more suggested pulse generator settings includes adjusting the one or more suggested pulse generator settings based on previously set values for the one or more suggested pulse generator settings.

44. (Withdrawn) The method of claim 43, wherein adjusting the one or more suggested pulse generator settings includes adjusting the AV delay to account for a sensed AV delay offset, and displaying a value for the AV delay.

45. (Withdrawn) The method of claim 1, wherein the first data value is a P-R interval duration.

46. (Withdrawn) The medical device programmer of claim 15, wherein the first data value is a P-R interval duration.